



**ADVOCATES**  
FOR HIGHWAY  
AND AUTO SAFETY

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Docket No. NHTSA-99-5 101, Notice 01  
Docket Management, Room PL-40 1  
U.S. Department of Transportation  
400 Seventh Street, SW  
Washington, DC 20590

**Comments on Truck Splash and Spray Reduction: Report to Congress  
64 FR 24709 *et seq.*, May 7, 1999**

Advocates for Highway and Auto Safety (Advocates) is pleased to submit the following comments to assist the National Highway Traffic Safety Administration (NHTSA) in its preparation of a report to Congress on heavy vehicle splash and spray countermeasures. Advocates notes at the outset of its comments that the legislative charge to NHTSA in report language accompanying the Fiscal Year 1999 Senate Appropriations bill was specifically “to make travel on the Nation’s highways safer and less *stressful*.” 64 FR 24709 (emphasis supplied). As a result, Advocates regards the agency’s responsibility to be not only to review potential countermeasures which could result in significant and measurable improvements in crash avoidance because of improved visibility for drivers of vehicles, especially of small passenger vehicles, which are adjacent to or trailing heavy vehicles, but also to reduce the stress and fearfulness that many thousands of drivers experience when negotiating a highway near a large truck during wet weather. This dual requirement of addressing both safety and the comfort of American drivers is not novel and, indeed, NHTSA has on numerous occasions cited the additional benefits of reducing the overall stressful character of operating passenger vehicles on



our nation's highways, particularly for older drivers whose numbers and percentage representation among vehicle operators has soared over the past decade and more. Advocates also believes that it is important to improve the overall sense of safety and security prevailing among the nation's passenger vehicle operators. Reinforcing the confidence of these drivers can redound to the benefit of general highway and traffic safety, even if, for example, specific measures of crash avoidance effectiveness for splash and spray countermeasures do not demonstrate substantial effects.

Advocates regards the effective reduction or suppression of heavy vehicle splash and spray as a systems engineering issue. Not only do different pavement surfaces produce substantially different levels or intensities of splash and, especially, of spray, but any splash and spray suppression devices mounted on heavy vehicles need to be complemented by improved windshield clearing. There is widespread dissatisfaction with the performance of windshield wipers on many current passenger vehicles which are unable to provide acceptable clearing of the driver's view ahead under conditions of intense rainfall and of heavy vehicle splash and spray. In this regard, 49 CFR 57 1.104, the Federal Motor Vehicle Safety Standard (FMVSS) for Windshield Wiping and Washing Systems, is badly outdated. Based on 1965- 1966 Society of Automotive Engineers voluntary standards for wiping speeds and clearance percentage of specific areas of windshields, Standard No. 104 does not provide adequate federal regulation guaranteeing minimum acceptable performance under severe weather conditions and heavy vehicle production of splash and spray.

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Advocates strongly recommends that NHTSA address the continuing problem of heavy vehicle splash and spray by means of a multifactorial approach which includes heavy vehicle splash/spray suppression features, revision of FMVSS No. 104 to raise the standard to a level which ensures appropriate windshield clearance under the most severe wet weather conditions, and cooperative effort with the Federal Highway Administration to guide the states to use riding surface pavement mixes and textures that provide reduced production of splash and spray by heavy vehicles while also achieving other desirable qualities such as high coefficients of friction, good ride comfort and noise suppression, and long-term durability.

Respectfully submitted,



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